



Telecommunications

TELUS Studios Makes a Good Call, Replacing Fibre Channel Storage with Qumulo's Modern Scale-Out Storage

TELUS Studios and Creative Design, which handles corporate video and graphic design for Canadian telecommunications company TELUS, replaced expensive and high-maintenance Fibre Channel storage with Qumulo's modern scale-out storage. Qumulo's affordable commodity hardware reduced cost while its unique scale-out architecture simultaneously gave TELUS Studios better visibility into storage usage.

A Fibre-Rich Diet

TELUS Studios and Creative Design are a division of Canadian telecommunications TELUS and are tasked with production of all corporate video and graphic design for the \$12 billion (CAD) company. Although its projects are generally modest (running 2-4TB on average), the team requires a scale-out storage solution that allows its staff of 30 to efficiently manage multiple files from pre-production to final delivery.

Until recently, the team's storage consisted of Quantum hardware for disk and tape, coupled with QLogic for private channel infrastructure. But these solutions were Fibre Channel (FC) based, using optical fiber rather than Ethernet connections, making it an expensive solution whose value proposition did not jibe with the company's relatively modest storage requirements.

"I knew Fibre Channel was not something we wanted to move forward with long term, because the price of fibre still hasn't come down to a point that's economical," explains Ronald Knol, Senior Technology Consultant for TELUS Studios.

Meanwhile, the Studios' biggest need – easy storage management and visibility – was sorely lacking. Managing the old FC solution was a cumbersome three step process: Knol had to first consult the QLogic interface to view FC statistics on the switch, then pull up Quantum's interface to see what the software was doing and then separately query the disk hardware for storage status.

"This was ridiculously time consuming and unproductive, so simplifying everything into a single management interface became a critical goal," says Knol, explaining that it's these kinds of inefficiencies that force IT departments to waste time on basic storage administration. "As we see it, the job of storage administration shouldn't exist. If your storage solution is truly doing its job, you should be able to focus on managing your data instead of managing your storage."

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With this in mind, Knol resolved to change the company's storage infrastructure from FC to scale-out storage, mapping out two key goals: driving down the cost of hardware, and finding a solution with a single, easy-to-read dashboard for monitoring capacity and other critical storage analytics.



Solution Overview

- 4 Qumulo QC24 hybrid storage appliances
- NFS, SMB and REST protocols
- Qumulo Care enterprise support

Key Benefits for TELUS Studios

- Lowers costs by eliminating reliance on expensive Fibre Channel-based storage
- Maintains user productivity through fast deployments and quick, cost-effective upgrades
- Decreases administration and improves management thanks to a single, intuitive dashboard
- Provides real-time data analytics for instant insight and visibility of file usage, capacity and performance
- Delivers proactive Qumulo Care support for uninterrupted operation

Qumulo Proves Itself 'Unbreakable'

Knol already had considerable experience with Isilon, making it one of the first places he looked for a solution. But, in the process, he noticed something interesting: many of the company's key players were leaving (or had already left) to start up a new modern scale-out storage company. And, he heard rumors that they would be solving one of his pet-peeves with Isilon: lack of real-time insight into their data.

"Isilon offers a single interface, but its missing real-time information like where the data is... what directory or folder?" says Knol. "In the past, I've worked around this by writing tons of little applications that figure out where disk capacity is being consumed. Given a large enough cluster, I'd get the results 24-hours later. But, by then we're already a day old."

Knol kept track of progress and when Qumulo officially launched, he was one of its first customers. Qumulo offers a modern approach to scale-out storage, delivering fast, flexible and highly scalable storage together with the real-time analytics necessary for visibility into data usage and performance at petabyte scale.

TELUS Studios and Creative Design selected Qumulo's QC24 hybrid storage appliances, deploying a four-node NFS-based cluster capable of storing nearly 100TB of data. Setting up his cluster was easy – in fact, the actual set-up was almost "too quick," Knol joked. "It took longer to unbox than to build the initial Qumulo cluster."

Testing the Qumulo cluster prior to putting it into production was equally eye opening for Knol. "We set out to break every storage system we use, just to find the limits," he notes. "And we've never once failed. We confidently promised the folks at Qumulo that we would break their product... yet the cluster has withstood every single test we can throw at it. That really gives you confidence as you move to production environments."

TELUS (TSX: T, NYSE: TU) is Canada's fastest-growing national telecommunications company, with \$12.4 billion of annual revenue and 14.0 million customer connections, including 8.4 million wireless subscribers, 3.1 million wireline network access lines, 1.5 million high-speed Internet subscribers and 980,000 TELUS TV customers. TELUS provides a wide range of communications products and services, including wireless, data, Internet protocol (IP), voice, television, entertainment and video, and is Canada's largest healthcare IT provider.

Costs Sink, Productivity Rises

As TELUS Studios migrates to the new storage infrastructure, a key objective for the IT team is to avoid any disruption. So far the process has been seamless and largely invisible to users, just what Knol wanted from his storage.

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What has been immediately noticeable, however, is the cost savings. "We don't need to run fiber, we don't need to wrestle with the storage for capacity upgrades, everything is just simple to manage using commodity hardware and connections," he notes. "Qumulo is much more economical than our other systems."

Equally apparent is the productivity boost for the IT team. Qumulo's single interface and real-time data analytics allow Knol to easily assess system status and note any potential problems. The dashboard's REST-API also allows for quick customization.

"With other vendors you have to really dig to find the source of hotspots that slow down IOPS," says Knol. "With Qumulo I can pop into any directory and see the number of files and terabytes consumed, or catch which clients are adversely impacting performance. That makes it easy to go to a project's production team and say, 'Hey, clean up your work product because you're taking up a lot of disk space' or identify and tweak a particular client to optimize throughput."

As TELUS Studios makes these changes and expands its deployment, the IT team has also come to depend on close interaction with the Qumulo Care enterprise support team.

"It's generally hard to get traction with our other vendors for upgrades or troubleshooting," Knol says. "With Qumulo Care, they're right there whenever I need them. They're even proactive about alerting me when changes I've requested are included in the updates that ship out every two weeks."

Going forward, TELUS Studios and Creative Design expects to expand their Qumulo deployment as part of plans to eventually take over external communication videos, including national and international commercial production.

It's hard to get ahead of the curve as technology changes, but Qumulo can simply do what none of the other storage players can," Knol says. "Qumulo promised to take my data and let me see the unseen, and in my experience that really sums up the impact it's having on our storage."

